

AMENDMENTS TO THE CLAIMS:

1. (Original) Chewing gum comprising at least one polymer, chewing gum ingredients and enzymes, wherein at least one of said polymers forms a substrate for at least one of said enzymes.

2. (Original) Chewing gum according to claim 1,
wherein said chewing gum includes center filling.

3. (Currently Amended) Chewing gum according to claim 1 ~~or 2~~,
wherein said chewing gum includes coating.

4. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-3,
wherein said chewing gum ingredients comprise sweeteners and flavors.

5. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-4,
wherein said chewing gum ingredients comprise softeners and further additives.

6. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-5,
wherein said at least one polymer constitutes a chewing gum base.

7. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-6,
wherein said at least one polymer comprises at least one copolymer.

8. (Currently Amended) Chewing gum according to claim 7 any of the claims 1-7,
wherein said at least one copolymer is polymerized of at least two different monomers,
each comprising 1-99%.

9. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-8,
wherein said at least one polymer comprises at least one biodegradable polymer.

10. (Currently Amended) Chewing gum according to claim 9 any of the claims 1-9,

wherein at least one of said at least one biodegradable polymer comprises at least one biodegradable elastomer.

11. (Currently Amended) Chewing gum according to claim 9 any of the claims 1-10,

wherein at least one of said at least one biodegradable polymer comprises at least one biodegradable elastomer plasticizer.

12. (Currently Amended) Chewing gum according to claim 9 any of the claims 1-11,

wherein at least one of said at least one biodegradable polymer comprises at least one polyester polymer obtained by polymerization of at least one cyclic ester.

13. (Currently Amended) Chewing gum according to claim 9 any of the claims 1-12,

wherein at least one of said at least one biodegradable polymer comprises at least one polyester polymer obtained by polymerization of at least one alcohol or derivative thereof and at least one acid or derivative thereof.

14. (Currently Amended) Chewing gum according to claim 9 any of the claims 1-13,

wherein at least one of said at least one biodegradable polymer comprises at least one polyester obtained by polymerization of at least one compound selected from the group of cyclic esters, alcohols or derivatives thereof and carboxylic acids or derivatives thereof.

15.-21. (Canceled)

22. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-21,

wherein at least one of said at least one polymer has amorphous regions.

23. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-22,

wherein said at least one polymer is aliphatic.

24. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-23,

wherein the molecular weight of said at least one polymer is within the range of 500 – 500000 g/mol, ~~preferably within the range of 1500 – 200000 g/mol Mn.~~

25.-31. (Canceled)

32. (Currently Amended) Chewing gum according to claim 12 any of the claims 1-31,

wherein at least one of said enzymes is accelerating the degradation of said polyester obtained by ring-opening polymerization of at least one cyclic ester.

33. (Currently Amended) Chewing gum according to claim 13 any of the claims 1-32,

wherein at least one of said enzymes is accelerating the degradation of said polyester obtained by polymerization of at least one alcohol or derivative thereof and at least one acid or derivative thereof.

34. (Canceled)

35. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-34,~~

wherein the chewing gum has water content of less than 10 wt%, ~~preferably less than 5 wt%, more preferably less than 1 wt% and most preferably less than 0.1 wt%.~~

36. (Canceled)

37. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-36,~~

wherein the chewing gum comprises filler in an amount of 0 to 80 wt%.

38. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-37,~~

wherein the concentration of said enzymes is in the range of 0.0001 wt% to 50 wt% of the chewing gum.

39. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-38,~~

wherein the concentration of said enzymes is in the range of 0.001 wt% to 10 wt% of the chewing gum.

40. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-39,~~

wherein the concentration of said enzymes is in the range of 0.01 wt% to 5 wt% of the chewing gum.

41. (Currently Amended) Chewing gum according to claim 1 ~~any of the claims 1-40,~~

wherein the amount of said enzymes is in the range of 0.0001 to 80 wt% related to the amount of gum base in the chewing gum.

42. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-41,

wherein the amount of said enzymes is in the range of 0.001 to 40 wt% related to the amount of gum base in the chewing gum.

43. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-42,

wherein the amount of said enzymes is in the range of 0.1 to 20 wt% related to the amount of gum base in the chewing gum.

44. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-43,

wherein at least one of said enzymes is selected from the group consisting of oxidoreductases, transferases, hydrolases, lyases, isomerases and ligases.

45.-55. (Canceled)

56. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-55,

wherein at least one of said enzymes is selected from the group of lipases, esterases, depolymerases, peptidases and proteases.

57. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-56,

wherein at least one of said enzymes is an endo-enzyme.

58. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-57,

wherein at least one of said enzymes is an exo-enzyme.

59. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-58,

wherein at least one of said enzymes has a molecular weight of 2 to 1000 kDa, ~~preferably 10 to 500 kDa.~~

60. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-59,

wherein at least two of said enzymes are combined.

61. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-60,

wherein at least one of said enzymes requires a co-factor to carry out its catalyzing function.

62. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-61,

wherein at least one of said enzymes is incorporated in the chewing gum.

63. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-

62,

wherein at least one of said enzymes is incorporated in ~~the~~ a gum base.

64. (Canceled)

65. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-64,

wherein at least one of said enzymes has optimum activity in the pH range from 1.0 to 11.0, ~~preferably 4.0 to 8.0 and most preferably 4.0 to 6.0.~~

66. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-65,

wherein at least one of said enzymes has optimum activity at temperatures in the range of -10 to 60°C, ~~preferably 0 to 50°C, more preferably 5 to 40°C and most preferably 10 to 35°C.~~

67. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-66,

wherein at least one of said enzymes has optimum activity in relative humidity conditions in the range of 10 to 100% RH, ~~preferably 30 to 100% RH.~~

68.-70 (Canceled)

71. (Currently Amended) Chewing gum according to claim 1 any of the claims 1-70,

wherein said chewing gum is compressed and prepared by use of compression techniques.

72. (Currently Amended) Use of at least one enzyme for degradation of biodegradable chewing gum.

73. (Original) Use of at least one enzyme according to claim 72,
wherein said at least one enzyme comprises hydrolases.

74.-75. (Canceled)